

What is claimed is:

Sub A1  
1. A method of assuring integrity of a personal information data base containing personal information provided by multiple users, the method comprising:

- 5
- a. obtaining a user's personal information from the user;
  - b. obtaining a first set of physiological identifiers associated with the user;
  - c. storing, in a digital storage medium, a data set pertinent to the user, the data set including the user's personal information and a representation of the physiological identifiers associated with the user;
  - 10 d. permitting a subject to modify information in the stored data set pertinent to the user only if (i) the subject provides a new set of physiological identifiers and (ii) it is determined, by recourse to the stored data set, that there is a sufficient match between at least one member in the new set and a
  - 15 corresponding member of the first set, so that the subject is authenticated as the user.

2. A method according to claim 1, further comprising obtaining a user's medical information from the user, and wherein the data set includes the user's medical information.

20 3. A method according to claim 1, wherein the first set includes a plurality of members.

Sub A2  
4. A method according to claim 1, wherein the first set of physiological identifiers includes the appearance of the user's face.

5. A method according to claim 1, wherein the first set of physiological identifiers includes characteristics of utterances of the user.

25 6. A method according to claim 1, wherein the first set of physiological identifiers includes a fingerprint of the user.

7. A method according to claim 1, wherein the first set of physiological identifiers includes the configuration of an iris in an eye of the user.

30 8. A method according to claim 1, wherein the first set includes at least one member selected from the group consisting of a fingerprint of the user and an

the configuration of an iris in an eye of the user and at least one member selected from the group consisting of characteristics of utterances of the user and the appearance of the user's face.

Sub D 3 5 9. A method according to claim 1, wherein, pursuant to step (d), a subject is permitted to modify information in the stored data set only if the subject provides the new set of physiological identifiers under a condition permitting verification, independent of the physiological identifiers, that the new set is being provided by the person purporting to provide them.

Sub E 10 10. A method according to claim 9, wherein the condition includes the physical presence of the subject when providing the new set.

11. A method according to claim 9, wherein the condition includes having the subject provide the new set when prompted to do so.

12. A method according to claim 9, wherein the condition includes having the subject provide a non-physiological identifier.

15 13. A method according to claim 12, wherein the non-physiological identifier is selected from the group consisting of a password and a pass card.

Sub F 20 14. A method according to claim 9, wherein the non-physiological identifier is provided in the course of a session, over a computer network, employing a user's public and private keys.

15. A method according to claim 1, further comprising:  
prompting a user, on a periodic basis, to update the data set pertinent to the user.

16. A method for authenticating a user transaction, the method comprising:

25 obtaining a test set of physiological identifiers from a subject purporting to be the user;

accessing information in the data set pertinent to the user stored in accordance with the method of claim 1; and

30 determining if there is a sufficient match between at least one member in the test set and a corresponding physiological identifier represented in the data set.

17. A method for authenticating a user transaction, the method comprising:

obtaining a test set of physiological identifiers from a subject purporting to be a specific user;

5 accessing information in a first data set pertinent to the specific user stored in a data base, the data base containing information provided by multiple users in a separate data set for each user, each data set including personal information of a user and a representation of a first set of physiological identifiers associated with the user, the data base being maintained under conditions wherein modification  
10 by a subject of information in a stored data set pertinent to the subject is permitted only if (i) the subject provides a new set of physiological identifiers and (ii) it is determined, by recourse to the stored data set, that there is a sufficient match between at least one member in the new set and a corresponding member of the first set, so that the subject is authenticated as the user; and

15 determining if there is a sufficient match between at least one member in the test set and a corresponding physiological identifier represented in the data set.

18. A method according to claim 17, wherein:

the database is accessible via a server at a first location;

20 obtaining the test of physiological identifiers is performed at a second location remote from the first location;

determining if there is a sufficient match includes communicating with the server from the second location over a network.

19. A method according to claim 18, wherein:

25 obtaining the test set of physiological identifiers is performed under supervision of a merchant.

20. A method according to claim 19, wherein:

determining if there is a sufficient match is performed without revealing content of the first data set to the merchant.

30 21. A method according to any of claims 18 through 20, wherein the transaction is a change of address for an account.

22. A method according to any of claims 18 through 20, wherein the transaction is an application to open an account.

23. A method according to claim 21, wherein the account authorizes the transfer of funds.

5 24. A method according to claim 22, wherein the account authorizes the transfer of funds.

25. A method according to claim 21, wherein the account is based on the extension of credit to the account holder.

10 26. A method according to claim 22, wherein the account is based on the extension of credit to the account holder.

27. A method according to claim 18, wherein the transaction is an application to a government agency for one of a license and a renewal of a license.

28. A method according to claim 18, wherein the transaction is an application to a government agency for one of an identification token and a  
15 renewal of an identification token.

29. A digital storage medium on which has been recorded a multi-user personal information data base, the data base comprising, for each user, a data set pertinent to such user, the data set including:

- 20 (a) such user's personal information obtained from the user;  
(b) a representation of a first set of physiological identifiers associated with the user; and  
(c) such user's emergency information obtained from the user.

30 30. A system for updating a personal information database containing a data set for each one of multiple users, each data set including a user's personal information and a representation of a first set of physiological identifiers associated with the user, the system comprising:

- 25 a. a physiological identifier transducer having an output representing a physiological identifier associated with a subject;  
b. a user access authorization module, coupled to the  
30 physiological identifier transducer, the database, for determining whether the output of the physiological identifier transducer sufficiently matches the

representation of the first set of physiological identifiers, so that the subject is authenticated as the user;

c. a user data set access module, coupled to the user access authorization module and to the database, for accessing the user data set, in the event that the user access authorization module has authenticated the subject as the user; and

d. a user data set update module, coupled to the database and to a user input, permitting the user to update such user's corresponding data set in the database.

31. A system for authenticating transactions, the system comprising:

a. a multi-user personal information data base, the data base comprising, for each user, a data set pertinent to such user, the data set including:

i. such user's personal information obtained from the user;

ii. a representation of a first set of physiological identifiers associated with the user;

b. a multiplicity of remotely distributed terminals in communication with the data base, each terminal including a physiological identifier transducer and a communication link with a merchant; and

c. an authenticity checker, which determines whether there is a sufficient match between the output of a physiological identifier transducer attributable to a subject purporting to be a user and a physiological identifier in the first set.

32. A system according to claim 31, wherein the first set includes a plurality of members.

33. A system according to claim 31, wherein the first set includes at least one member selected from the group consisting of a fingerprint of the user and the configuration of an iris in an eye of the user and at least one member selected from the group consisting of characteristics of utterances of the user and the appearance of the user's face.